



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,166	03/26/2004	Jurgen Richter	1825.005USX	2003

7590 12/05/2007
OHLANDT, GREELEY, RUGGIERO & PERLE, L.L.P.
ONE LANDMARK SQUARE, 10th FLOOR
STAMFORD, CT 06901-2682

EXAMINER	
DUNWOODY, AARON M	

ART UNIT	PAPER NUMBER
3679	

MAIL DATE	DELIVERY MODE
12/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,166

Applicant(s)

RICHTER ET AL.

Examiner

Aaron M. Dunwoody

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-17, 20-27 and 29-39 is/are pending in the application.
- 4a) Of the above claim(s) 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-17, 20-27 and 29-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

From the onset, it should be noted that first and second end flexible tubing or pipes are not considered part of the claimed invention.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/2/2007 has been entered.

Election/Restrictions

Newly submitted claim 39 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The originally claimed invention was a clamp and not a method of connecting a first end of a flexible tubing or pipe to a second end of a pipe.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 39 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13, 15-17, 20-27 and 29-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 appears to define the claimed invention of a clamp in terms of the non-claimed functional first and second ends.

Note, the first and second end flexible tubing or pipes are not considered part of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, 11-13 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4790574, Wagner et al in view of US patent 852997, Brandram.

In regards to claims 1 and 34, Wagner et al disclose a clamp, comprising:
a clamping band (72) configured to mate over segment where the first end overlaps the second end;

opposite-lying flange segments extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (123) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Wagner et al do not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material, sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Noted, the first and second end flexible tubing or pipes are not considered part of the claimed invention.

In regards to claim 9, Wagner et al disclose the spreading prevention means being a rotation lock for tightening the clamping band on the first and second ends.

In regards to claim 11, Wagner et al disclose a bolt having a polygon portion formed on the bolt, the polygon portion being accommodated by a correspondingly

formed hole in the opposite-lying flange segments in a manner that prevents rotation of the bolt.

In regards to claim 12, Wagner et al disclose a nut (102) for attachment to the bolt, the nut having an undercut for accommodating a region of the polygon portion.

In regards to claim 13, Wagner et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Wagner et al in view of Brandram, in further view of US patent 4049298, Foti.

In regards to claim 35, Wagner et al in view of Brandram disclose the claimed invention except for a seal arrangement. Foti teaches a seal arrangement (22) "making the coupling less expensive than couplings having a circumferential gasket" (col. 1, lines 63-65). As Foti relates to joints or coupling, and particularly to a compression coupling, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a seal arrangement making the coupling less expensive than couplings having a circumferential gasket, as taught by Foti.

In regards to claim 38, Wagner et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

Claims 1, 2, 10, 13, 21, 22-25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 3944265, Hiemstra et al in view of Brandram.

In regards to claims 1 and 34, Hiemstra et al disclose a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (21) configured to mate over the first and second ends;

opposite-lying flange segments extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (30) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Hiemstra et al do not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material, sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the

device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In regards to claim 2, Hiemstra et al disclose the region being an angle defined between band and the opposite-lying flange segments.

In regards to claim 10, Hiemstra et al disclose the opposite-lying flange segments having reinforcing plates (27).

In regards to claim 13, Hiemstra et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards claim 21, Hiemstra et al disclose a sealing element (27) arranged between one the opposite-lying flange segments.

In regards claim 22, Hiemstra et al disclose the sealing element being strip-shaped.

In regards to claim 23, Hiemstra et al in view of Brandram disclose the claimed invention except for the sealing element having a round cross section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the sealing element with a round cross section, since a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 24, Brandram discloses the sealing element being made of a material that is resistant to high temperature.

In regards to claim 25, Hiemstra et al in view of Brandram disclose the claimed invention except for the sealing element being made of glass fiber. It would have been

obvious to one having ordinary skill in the art at the time the invention was made to fabricate the sealing element of glass fiber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 35, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Hiemstra et al in view of Brandram, in further view of US patent 4049298, Foti.

In regards to claim 35, Hiemstra et al in view of Brandram disclose the claimed invention except for a seal arrangement. Foti teaches a seal arrangement (22) "making the coupling less expensive than couplings having a circumferential gasket" (col. 1, lines 63-65). As Foti relates to joints or coupling, and particularly to a compression coupling, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a seal arrangement making the coupling less expensive than couplings having a circumferential gasket, as taught by Foti.

In regards to claim 37, Hiemstra et al in view of Brandram disclose the claimed invention except for the sealing element having a round cross section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the sealing element with a round cross section, since a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 38, Hiemstra et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

Claims 1, 3, 4, 13, 15-17, 20, 21 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5131698, Calmettes et al in view of Brandram.

In regards to claims 1, 34 and 35, Calmettes et al disclose a clamp for connecting a first end of a flexible tubing or pipe two a second end of a pipe, comprising:

- a clamping band (1) configured to mate over the first and second ends;
- opposite-lying flange segments extending substantially radially outward from the clamping band, and
- means for preventing tension from spreading (5) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Calmettes et al do not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material, sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In regards to claim 3, Calmettes et al disclose the spreading prevention means having at least one rib.

In regards to claim 4, Calmettes et al disclose the rib being a molded bead disposed at the region.

In regards to claim 13, Calmettes et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 15, Calmettes et al disclose the sliding crosspiece being essentially square.

In regards to claim 16, Calmettes et al disclose the sliding crosspiece having a stepped impression.

In regards to claim 17, Calmettes et al disclose the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, the limitations of the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter is given little patentable weight.

In regards to claim 20, Calmettes et al disclose the sliding crosspiece being made of a deformable material.

In regards to claim 21, Calmettes et al disclose a sealing element (8) arranged between one the opposite-lying flange segments.

Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Calmettes et al in view of Brandram, in further view of US patent 4049298, Foti.

In regards to claim 35, Calmettes et al in view of Brandram disclose the claimed invention except for a seal arrangement. Foti teaches a seal arrangement (22) "making the coupling less expensive than couplings having a circumferential gasket" (col. 1, lines

63-65). As Foti relates to joints or coupling, and particularly to a compression coupling, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a seal arrangement making the coupling less expensive than couplings having a circumferential gasket, as taught by Foti.

In regards to claim 38, Calmettes et al disclose the spreading prevention means having at least one rib.

Claims 1-3, 5-8, 13, 15-17, 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5383496, Bridges et al in view of Brandram.

In regards to claims 1 and 34, Bridges et al disclose a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (20) configured to mate over the first and second ends;

opposite-lying flange segments (52, 54) extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (56) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Bridges et al do not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material,

sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In regards to claim 2, Bridges et al disclose the region being an angle defined between the clamping band and the opposite-lying flange segments.

In regards to claim 3, Bridges et al disclose the spreading prevention means having at least one rib.

In regards to claim 5, Bridges et al disclose the rib being an angle sheet iron.

In regards to claim 6, Bridges et al disclose the rib being arranged on an outer edge of the clamping band.

In regards to claim 7, Bridges et al disclose the rib being secured to the clamping band by a weld.

In regards to claim 8, Bridges et al disclose the spreading prevention means being a welded region for securing the opposite-lying, flange segments to the clamping band.

In regards to claim 13, Bridges et al disclose the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 15, Bridges et al disclose the sliding crosspiece being essentially square.

In regards to claim 16, Bridges et al disclose the sliding crosspiece having a stepped impression.

In regards to claim 17, Bridges et al disclose the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, the limitations of the stepped impression prior to assembly, extends only over a part a perimeter of the sliding crosspiece, and wherein the sliding crosspiece, prior to assembly, is essentially flat along a remaining part of the perimeter is given little patentable weight.

In regards to claim 20, Bridges et al disclose the sliding crosspiece being made of a deformable material.

Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Bridges et al in view of Brandram, in further view of US patent 4049298, Foti.

In regards to claim 35, Bridges et al in view of Brandram disclose the claimed invention except for a seal arrangement. Foti teaches a seal arrangement (22) "making the coupling less expensive than couplings having a circumferential gasket" (col. 1, lines 63-65). As Foti relates to joints or coupling, and particularly to a compression coupling, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a seal arrangement making the coupling less expensive than couplings having a circumferential gasket, as taught by Foti.

In regards to claim 38, Bridges et al disclose the spreading prevention means having at least one rib.

Claims 1, 2, 8, 10, 13, 30-35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4049298, Foti in view of Brandram.

In regards to claims 1, 34 and 35, Foti discloses a clamp for connecting a first end of a flexible tubing or pipe to a second end of a pipe, comprising:

a clamping band (13, 54) configured to mate over the first and second ends;

opposite-lying flange segments (21, 24, 59, 64) extending substantially radially outward from the clamping band, and

means for preventing tension from spreading the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Foti does not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material, sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In regards to claim 2, Foti discloses the region being an angle defined between the clamping band and the opposite-lying flange segments.

In regards to claims 8 and 38, Foti discloses the spreading prevention means being a welded region for securing the opposite-lying, flange segments to the clamping band.

In regards to claim 10, Foti discloses the opposite-lying flange segments being reinforcing plates (28, 30, 68, 70).

In regards to claim 13, Foti discloses the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 30, Foti discloses the first and second ends having a butt jointed transition (13) having a continuously encircling ring arranged at the butt-jointed transition.

In regards to claim 31, Foti discloses the continuously encircling ring being a bead impressed into the clamping band.

In regards to claim 32, Foti in view of Brandram disclose the claimed invention except for the continuously encircling ring being of plastic or elastomeric material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the continuously encircling ring of plastic or elastomeric material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regards to claim 33, Foti discloses comprising a plastic or highly elastic sealing material being employed on so the intersecting edges.

Claims 1, 13, 26, 27, 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5362107, Bridges in view of Brandram.

In regards to claims 1 and 34, Bridges discloses a clamp for connecting a first end of a flexible tubing or pipe two a second end of a pipe, comprising:

a clamping band (50) configured to mate over the first and second ends;
opposite-lying flange segments (53a,b) extending substantially radially outward from the clamping band, and

means for preventing tension from spreading (57a,b) the clamping band, the spreading prevention means being disposed in a region proximate at least one of the opposite-lying flange segments, wherein the clamping band has two free ends defining a gap between the two free ends.

Bridges does not disclose a gap being saddled by a high strength material, sliding crosspiece. Brandram teaches a gap being saddled by a high strength material, sliding crosspiece (d) so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint (lines 37-46). As Brandram relates to joints for pipes, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a high strength material, sliding crosspiece saddling a gap so that a considerable pressure is exerted upon the pipe ends to perfect a watertight joint, as taught by Brandram.

Further, Applicant has not shown that the particular dimensions recited in the claim are critical or provide an unexpected result. As such, the limitations are met by the device shown in Brandram which is capable of being manufactured to the claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In regards to claim 13, Bridges discloses the spreading prevention mean being disposed on the opposite lying flange segments.

In regards to claim 26, Bridges discloses a saddle (11) covering the clamping gap of the first and second ends defined between the opposite-lying flange segments and a means for preventing leakage at intersecting edges of the saddle and the clamping band.

In regards to claim 27, Bridges discloses the means for preventing leakage being constructed as a labyrinth seal.

In regards to claim 29, Bridges discloses the means for preventing leakage being a plastically or elastically deformable sealing material arranged along the intersecting edges.

Claims 35, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent Bridges in view of Brandram, in further view of US patent 4049298, Foti.

In regards to claim 35, Bridges in view of Brandram disclose the claimed invention except for a seal arrangement. Foti teaches a seal arrangement (22) "making

the coupling less expensive than couplings having a circumferential gasket" (col. 1, lines 63-65). As Foti relates to joints or coupling, and particularly to a compression coupling, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a seal arrangement making the coupling less expensive than couplings having a circumferential gasket, as taught by Foti.

In regards to claim 36, Bridges discloses the means for preventing leakage being constructed as a labyrinth seal.

In regards to claim 38, Bridges discloses the spreading prevention mean being disposed on the opposite lying flange segments.

Response to Arguments

Applicant's arguments filed 11/2/2007 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not disclose the sliding crosspiece molds to the segment under the effect of a tightening pressure imparted by said spreading prevention means so that said sliding crosspiece compensates for difference in tolerances between the first and second ends. The Examiner disagrees, and has considered the amended claims even if the amendments do not appear in the rejection above. First, the first and second ends are not considered part of the claimed invention. Second, the prior art is fully capable of performing the recited function.

Further, it is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior

art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971); In re Shreiber, ___ F.2d at ___, 44 USPQ2d 1429 (Fed. Cir. 1997).

Applicant argues that the cited art fails to disclose or suggest the use of the sliding crosspiece in combination with a clamping band that is configured to mate over a segment of overlapped pipe ends as claimed. The Examiner disagrees. It has been held that the recitation that an element is "adapted to" [configured to] perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. The prior art is fully capable of mating over a segment of overlapped pipe ends as claimed.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion to combine the reference can be found in the rejections above.

In response to applicant's arguments against the references individually, in particular, Brandram specifically discloses the sliding cross pieces only being applicable to pipes with butt ends, or with rabbeted ends, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

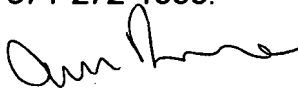
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/811,166
Art Unit: 3679

Page 23

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Aaron M Dunwoody
Primary Examiner
Art Unit 3679

.amd